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| 09/729,351 | 12/05/2000 | Tomohiko Teranishi | 011350-265 | 6715 |
| 21839 | 7590 | 10/07/2004 | EXAMINER | |
| BURNS DOANE SWECKER & MATHIS L L P | | | BURLESON, MICHAEL L | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,351

Applicant(s)

TERANISHI ET AL.

Examiner

Michael Burleson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted was 12/05/2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyake US 6188490.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes and/or orientations. Miyake teaches of a personal computer (1) that serves as a print processing device (column 3, lines 1-3 and figure 1), which reads on a processing unit for processing the received document data so that the multiple document images can be printed on a sheet of paper. He teaches of a layout calculating unit (E3) that calculates a layout quantity based on the original image (column 4, lines 14-20 and figure 4), which reads on an identifying unit for identifying an area, which is not yet covered with document images. He also teaches of a layout quantity assessment unit (F3), which assess whether or not the layout quantity matches a received value (column 4, lines 21-30 and figure 4), which reads on a judging unit for judging whether new document images or images can be laid out in said area.

Regarding claim 2, Miyake teaches of a layout quantity assessment unit (F3), which assess whether or not the layout quantity matches a received value and then sends the data to a sheet quantity change unit (F5) to print images on another sheet (column 4, lines 21-30 and lines 40-48 and figure 4). This reads on the judgment unit

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judges that no new document image or images can be laid out in said area, it's new document image or those new document images shall be laid out on another sheet of paper.

Regarding claim 3, Miyake shows document images adjacent to each other (figure 5), which reads on processing unit lays out document images adjacent to each other.

Regarding claim 4, claim 4 is rejected for the same reasons as claim 1.

Regarding claim 5, Miyake teaches of a print driver (PD) which is software effecting print processing (column 3, lines 3-5), which reads on a computer program product for image processing. Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes and/or orientations. Miyake teaches of a personal computer (1) that serves as a print processing device (column 3, lines 1-3 and figure 1), which reads on a processing unit for processing the received document data so that the multiple document images can be printed on a sheet of paper. He teaches of a layout calculating unit (E3) that calculates a layout quantity based on the original image (column 4, lines 14-20 and figure 4), which reads on an identifying unit for identifying an area, which is not yet covered with document images. He also teaches of a layout quantity assessment unit (F3), which assess whether or not the layout quantity matches a received value (column 4, lines 21-30 and figure 4), which reads on a judging unit for judging whether new document images or images can be laid out in said area.

Regarding claim 6, Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on a detecting unit for detecting a maximum size of document images based on the received image data. He teaches of a layout quantity assessment unit (F3), in which the image size and sheet size of a layout pattern is carried out (column 3, lines 25-29 and column 4, lines 21-30), which reads on a selecting unit for selecting paper with a size equal to or larger than the detected maximum size. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

Regarding claim 7, Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on a detecting unit for detecting a maximum size of document images based on the received image data. He teaches of a layout quantity assessment unit (F3), in which the image size and sheet size of a layout pattern is carried out (column 3, lines 25-29 and column 4, lines 21-30), which reads on a selecting unit for selecting paper with a size equal to or larger than the detected maximum size. He also teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28), which

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reads on a calculating unit for calculating a scaling factor that causes the detected maximum size to match with the size of a print area. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on the calculated scaling factor. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

Regarding claim 8, Miyake shows that the print area is a sheet of paper (figure 2), which reads on the print area is the entire area of paper.

Regarding claim 9, Miyake shows that the print area is divided into several parts (figure 2), which reads on the print area is an area obtained by dividing the entire area of paper to equal parts.

Regarding claim 10, claim 10 is rejected for the same reasons as claim 7.

Regarding claim 11, Miyake teaches of a print driver (PD) which is software effecting print processing (column 3, lines 3-5), which reads on a computer program product for image processing. Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on a detecting unit for detecting a maximum size of document images based on the received image data. He teaches of a layout quantity assessment unit (F3), in which the image size and sheet size of a

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layout pattern is carried out (column 3, lines 25-29 and column 4, lines 21-30), which reads on a selecting unit for selecting paper with a size equal to or larger than the detected maximum size. He also teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28), which reads on a calculating unit for calculating a scaling factor that causes the detected maximum size to match with the size of a print area. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on the calculated scaling factor. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67), which reads on a forming unit for forming images based on the image data on the selected paper.

Regarding claim 12, Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on a detecting unit for detecting a maximum size of document images based on the received image data. He also teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28 and figure 2), which reads on a calculating unit for calculating a scaling factor that causes the detected size of each

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document image to match with the size of a print area obtained by dividing the paper into equal parts. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on each corresponding calculated scaling factor. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67 and figure 5), which reads on a forming unit for forming each image based on the processed image data in each print area obtained by dividing the paper into equal parts.

Regarding claim 13, Miyake teaches of a controller (21) which transmits print data to be printed (column 3, lines 8-12 and figure 2 and 5), which reads on a control unit for transmitting the image data processed in said processing unit in such a way that each scaled document image be printed at the center of each print area.

Regarding claim 14, Miyake teaches of a controller (21), which processes the print data (column 3, lines 8-12 and figure 2 and 5), which reads on an instructing unit for instructing the number of said equal parts.

Regarding claim 15, claim 15 is rejected for the same reasons as claim 12.

Regarding claim 16, Miyake teaches of a print driver (PD) which is software effecting print processing (column 3, lines 3-5), which reads on a computer program product for image processing. Miyake teaches of a printer driver (figure 4), which reads on a receiving unit for receiving image data based on multiple document images of various sizes. Miyake teaches of a layout calculating unit (E3) that calculates layout quantity per page (column 4, lines 14-20), which reads on a detecting unit for detecting

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a maximum size of document images based on the received image data. He also teaches that the print driver (PD) applies a pattern in which, enlargement or reduction corresponds to the relationship between image size and sheet size such that printing takes place on the entire sheet (column 3, lines 21-28 and figure 2), which reads on a calculating unit for calculating a scaling factor that causes the detected size of each document image to match with the size of a print area obtained by dividing the paper into equal parts. Miyake teaches of a print data generator (E5) that changes original image magnifications to correspond to sheet size (column 4, lines 36-39 and figure 4), which reads on a processing unit for scaling up or down the sizes of the document images based on each corresponding calculated scaling factor. He also teaches on a printer (20) that analyzes print data and prints the image (column 2, lines 66-67 and figure 5), which reads on a forming unit for forming each image based on the processed image data in each print area obtained by dividing the paper into equal parts.

Conclusion

1. Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (703) 305-8683 and fax number is (703) 746-3006. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (703) 305-4863

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Michael Burleson
Patent Examiner
Art Unit 2626

MB

Mlb
September 28, 2004

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SUPERVISORY PATENT EXAMINER